

AMENDMENTS TO THE CLAIMS

Please cancel claims 32 and 34 without prejudice or disclaimer to the subject matter described therein. Please amend claims 29, 31, and 33 as indicated below.

1. (Withdrawn) A nucleotide sequence of an isoform of an A-chain gene involved in biosynthesizing lectins isolated from Korean mistletoe, comprising SEQ ID NO. 1.

2. (Withdrawn) An amino acid sequence deduced from the sequence of claim 1, involved in biosynthesizing lectins isolated from Korean mistletoe, comprising SEQ ID NO 2.

3. (Withdrawn) A nucleotide sequence of an isoform of an A-chain gene involved in biosynthesizing lectins isolated from Korean mistletoe, comprising SEQ ID NO. 3.

4. (Withdrawn) An amino acid sequence deduced from the sequence 15 of claim 3, involved in biosynthesizing lectins isolated from Korean mistletoe, comprising SEQ ID NO 4.

5. (Withdrawn) A nucleotide sequence of an isoform of an A-chain gene involved in biosynthesizing lectins isolated from

Korean mistletoe, comprising SEQ ID NO. 5.

6. (Withdrawn) An amino acid sequence deduced from the sequence of claim 5, involved in biosynthesizing lectins isolated from Korean mistletoe, comprising SEQ ID NO. 6.

7. (Withdrawn) A nucleotide sequence of an isoform of a B-chain gene involved in biosynthesizing lectins isolated from Korean mistletoe, comprising SEQ ID NO. 7.

8. (Withdrawn) An amino acid sequence deduced from the sequence of claim 7, involved in biosynthesizing lectins isolated from Korean mistletoe, comprising SEQ ID NO. 8.

9. (Withdrawn) A nucleotide sequence of an isoform of a B-chain gene involved in biosynthesizing lectins isolated from Korean mistletoe, comprising SEQ ID NO. 9.

10. (Withdrawn) An amino acid sequence deduced from the sequence of claim 9, involved in biosynthesizing lectins isolated from Korean mistletoe, comprising SEQ ID NO. 10.

11. (Withdrawn) A nucleotide sequence of an isoform of a B-chain gene involved in biosynthesizing lectins isolated from

Korean mistletoe, comprising SEQ ID NO. 11.

12. (Withdrawn) An amino acid sequence deduced from the sequence of claim 11, involved in biosynthesizing lectins isolated from Korean mistletoe, comprising SEQ ID NO. 12.

13. (Withdrawn) A lectin isolated from Korean mistletoe.

14. (Withdrawn) The lectin of claim 13, wherein the lectin is selected from the group consisting of KML-IIU and KML-IIL.

15. (Withdrawn) The lectin of claim 14, wherein the lectin is KML-IIU.

16. (Withdrawn) The lectin of claim 15, wherein the lectin has a molecular weight of 61.8 kD.

17. (Withdrawn) The lectin of claim 14, wherein the lectin is KML-IIL.

18. (Withdrawn) The lectin of claim 17, wherein the lectin has a molecular weight of 56.4 kD.

19. (Withdrawn) A method for preparing a lectin isolated from

Korean mistletoe comprising separating a lectin fraction extracted from Korean mistletoe by immuno-affinity column chromatography.

20. (Withdrawn) The method of claim 19, wherein the lectin fraction is KML-C.

21. (Withdrawn) The method of claim 20, wherein the lectin is selected from the group consisting of KML-IIU and KML-IIL.

22. (Withdrawn) The method of claim 21, wherein the immuno-affinity column is a HiTrip NHS activated affinity column in which 9H7-D10 antibody is immobilized.

23. (Withdrawn) A method of enhancing immunity comprising administering to an animal a lectin isolated from Korean mistletoe.

24. (Withdrawn) The method of claim 23, wherein the lectin is selected from the group consisting of KML-IIU OR KML-IIL.

25. (Withdrawn) The method of claim 24, wherein the lectin is KML-IIU.

26. (Withdrawn) The method of claim 25, wherein the lectin has a molecular weight of 61.8 kD.

27. (Withdrawn) The method of claim 24, wherein the lectin is KML-IIL.

28. (Withdrawn) The method of claim 27, wherein the lectin has a molecular weight of 56.4 kD.

29. (Currently amended) A method of effectuating antitumoral activity, comprising administering to an animal in need thereof an ~~effective~~ amount of a lectin isolated from Korean mistletoe effective to enhance an anti-tumoral immune response, to reduce the size of a tumor, to inhibit tumor growth, to inhibit metastasis of a tumor, or a combination thereof,

~~wherein said effectuating antitumoral activity comprises:~~
~~enhancing an anti-tumoral immune response, reducing the size of a tumor, inhibiting tumor growth, and/or inhibiting metastasis of a tumor, and~~

wherein the lectin is selected from the group consisting of KML-IIU having a molecular weight of 61.8 kD and KML-IIL having a molecular weight of 56.4 kD.

30. (Canceled)

31. (Currently amended) The method of claim 29, wherein said KML-IIU has the amino acid sequence SEQ. ID NO: 16. ~~SEQ. ID NO. 16.~~

32. (Canceled) The method of claim 31, wherein the lectin has a molecular weight of 61.8 kD.

33. (Currently amended) The method of claim 29, wherein said KML-IIL has the amino acid sequence SEQ. ID NO: ~~SEQ. ID NO:~~ 14.

34. (Canceled) The method of claim 33, wherein the lectin has a molecular weight of 56.4 kD.

35. (Withdrawn) A gene encoding a lectin isolated from Korean mistletoe, comprising SEQ ID No 13.

36. (Withdrawn) A protein having SEQ ID NO 14.

37. (Withdrawn) A gene encoding a lectin isolated from Korean misteltoe, comprising SEQ ID NO 15.

38. (Withdrawn) A protein having SEQ ID NO 16.

39. (Withdrawn) A method of inducing IFN- γ comprising administering to an animal Korean Mistletoe Heparin Binding Protein (KMHBP).

40. (Withdrawn) A method of preparing Korean Mistletoe Heparin

Binding Protein (KMHBP) protein fraction by binding C-free AS to a heparin column, wherein the C-free AS is a portion of a KM-AS protein free of a KML-C lectin component.

41. (Withdrawn) A method of enhancing immunity comprising administering to an animal Korean Mistletoe Heparin Binding Protein (KMBHP) protein fraction.

42. (Withdrawn) A mixture (KM) of KML-C and KMHBP.

43. (Withdrawn) A method of enhancing immunity and effectuating antitumoral activity comprising use of a mixture (KM) of KML-C and KMHBP.

44. (Withdrawn) A method of preparing a mixture (KM) of KML-C and KMHBP by combining a lectin component KML-C and a protein fraction KMHBP.

45. (Withdrawn) A pharmaceutical composition comprising a lectin isolated from Korean mistletoe; and a pharmaceutically acceptable carrier.

46. (Withdrawn) The pharmaceutical composition of claim 45, wherein the lectin is selected from the group consisting of KM-IIU

and KM-IIL.

47. (Withdrawn) A pharmaceutical composition comprising a protein fraction KMHBP; and a pharmaceutically acceptable carrier.

48. (Withdrawn) A pharmaceutical composition comprising a mixture (KM) of KML-C and KMHB; and a pharmaceutically acceptable carrier.